

per day¹ nearly the entire output of the existing treatment plant. The water treatment plant may have to be expanded in order for the municipality to meet its obligation under the forty-year contract with the rural water company. Similar figures of the projected consumption for Draper indicate that 362,950 gallons per day will be needed by 1980, while approximately 372,640 gallons per day will be consumed by the population of Spray. These estimates do not include water for industrial purposes. Existing industries provide their own water and the water needs of new industries that may come to the area will be determined by the manufacturing process. Since Draper and Spray purchase water from Fieldcrest Mills, the municipalities have the alternative of continuing this arrangement as long as the company is able to supply their demands or the towns may construct their own pumping, storage, and purification facilities.

Although various methods are used by local governments in North Carolina to meet their water responsibilities, a municipal supply and distribution system is the most common. Of the 305 municipalities in the state that² have a water system, 300 own both the treatment plant and network of distribution lines. There are a number of advantages that accrue to a community from a public water system:

- The municipality can act independently in matters pertaining to extension of the system
- Charges for water are often lower
- Efficiently administered, it may make a profit for the city
- Water and sewer facilities can be developed in accordance with a master plan
- Problems of coordinating water service with private suppliers are eliminated

Consideration must also be given to the supply of water for urban fringe areas which will eventually be annexed by one of the municipalities. Present practices for providing water to these areas are creating problems which will have to be solved when the areas become part of a municipality. Lines of inadequate size are being installed both by the municipalities and private water companies. In addition development is occurring more than 500 feet from fire hydrants. Waterlines have been extended without a plan for providing public sewers.

¹ This estimate is based on figures for future water consumption developed by the Public Works Journal Corporation and published in the Public Works Journal, Dec. 1956. Estimated water consumption is expected to be 170 gallons per capita per day by 1976.

² The North Carolina League of Municipalities reports that of the 305 towns with water systems, Wingate, Star, Draper, Spray, and Cary do not own a complete municipal treatment and distribution system.